

AN ANNOTATED BIBLIOGRAPHY OF PALEONTOLOGICAL AND SYSTEMATIC PAPERS
ON FISH-OTOLITHS, PUBLISHED SINCE 1968*

by

Beatrijs Huyghebaert & Dirk Nolf
Gent
Belgium

VLIZ (vzw)
VLAAMS INSTITUUT VOOR DE ZEE
FLANDERS MARINE INSTITUTE
Oostende - Belgium

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The present paper constitutes a tentative to list all references of otolith publications posterior to, or not included in Weiler's 'Otolithi Piscium' (Fossilium Catalogus, Animalia, pars 117), published in 1968. After each reference, new species and/or illustrated recent otoliths are listed. Names of species are taken from the original publications, without evaluation of their validity. Finally an alphabetic, non-interpretative list of all fossil nominal species described since 1968 is given.

Lic. B. Huyghebaert and Dr. D. Nolf, Geologisch Instituut, Laboratorium voor Paleontologie, Rijksuniversiteit Gent, Krijgslaan 271, B-9000 Gent, België.

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INTRODUCTION

With the publication of volume 117 (*Otolithi Piscium*) of the 'Fossilium Catalogus' Weiler (1968) supplied an extremely valuable basic document for the palaeontological and systematic study of otoliths. In this work Weiler gave an almost complete list of papers on recent and fossil otoliths then published. Simultaneously with a systematic list of illustrations of recent otoliths the author gave his interpretation of all published fossil species.

A rather complete library on this subject was composed by one of us (D.N.) after thoroughly collecting all the literature that has appeared since 1968. The interest in otoliths has increased in the same period among palaeontologists and ichthyologists. Therefore the number of papers published after this date and their importance are almost equal to all those that appeared before.

The authors decided to compose the present paper because during their otolith studies they constantly felt the need of a complementary bibliography. At first a list of references was composed by B. Huyghebaert, based on the collection of papers brought together by D. Nolf. Together with the references of papers published after 1968 those papers were included that were published before 1968 but not mentioned by Weiler. Subsequently the list was completed with bibliographic data collected in the library of J. Fitch, during a visit of D. Nolf in 1977. Moreover some forty additional references, mainly concerning not well-known older publications could be added after checking all the headings 'otoliths' in the Check-list of fishes of the north-eastern Atlantic and of the Mediterranean (CLOFNAM), edited by Hureau & Monod (1973). Finally a tentative for completion with the 'Dean Bibliography of Fishes' and of the 'Zoological Record' proved to be very time-consuming but less fruitful. All in all this may give an impression of the degree of completeness of the list.

As expressed in the title of this paper the authors concentrated in the first place on palaeontological and systematic literature, but also included a number of references concerning fishery, as well as physiology, cristallography, chemical composition etc. of otoliths. In these related fields, however, the references given will probably be less complete.

Titles of unpublished theses (e.g. those of Cappetta, Kartas, Lafond-Grellety, Lamber, Nolf, Pointer, Salem, Stringer and others) are deliberately omitted. Though of several of these documents a considerable number of mimeographed copies was distributed among specialists it is the opinion of the authors that they may not be regarded as publications in the sense of art. 8 and 8a of the International Code of Zoological Nomenclature. Citing chapters on otoliths in general works, as e.g. the 'Traité de Zoologie' of Grassé, the 'Lehrbuch der Paläozoologie' of Müller, the 'History of Fishes' of Norman, etc. has been renounced.

Besides bibliographic references the authors also wanted to list all the fossil species introduced after 1968 and of illustrations of recent species. Probably otolithology has made most progress in this last field. For this reason each reference is followed by the headings 'new fossil species' and 'illustrated recent otoliths'. All species are cited with the names used by the concerning author, whether valid or not. The composition of the name is the same as in the paper concerned.

The authors decided not to compose a systematic list of the recent material, because illustrations of recent otoliths that are badly identified or cited with incorrect names are rather frequently found in literature. For the fossil species they restricted themselves to an alphabetical list of the nominal species. A systematic list would have been more useful, but would have required a revision of a considerable number of species, many of which would have been useless or unjustified. It would have been a job largely exceeding the scope of the present paper.

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Basically the abbreviations of names of periodicals are those used by the periodical itself. In cases where it fails to give such an abbreviation the one suggested by Fischer, 1974 is used (Abkürzungsverzeichnis zum Zitieren von erdwissenschaftlichen Zeitschriften. - Schweiz. geol. Komm.: 1 - 30).

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 Illustrated recent otoliths: *Pagellus centrodontus*, *P. belloti*, *Dentex macrophthalmus*, *Pagrus auriga*, *P. pagrus*, *Sparus auratus*.
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Illustrated recent otolith: *Exocoetus volitans*.

Kotthaus, A., 1969b. Fische des Indischen Ozeans.... V. Solenichthyes und Anacanthini. – 'Meteor' Forsch.-Ergebnisse, D (4): 32 - 46, 20 fig.

Illustrated recent otoliths: *Bregmaceros atlanticus*, *B. nectabanus*, *B. arabicus*, *B. maclellandii*.

Kotthaus, A., 1970a. Fische des Indischen Ozeans.... VI. Anacanthini (2), Berycomorphi, Zeomorphi. – 'Meteor' Forsch.-Ergebnisse, D (5): 53 - 70, 22 fig.

Illustrated recent otoliths: *Physiculus peregrinus*, *Melanonus zugmayeri*, *Polymixia fusca*, *Myripristis berndti*, *Scopelogadus mizolepis*, *Melamphaes simus*, *M. danae*, *Antigonia rubescens*.

Kotthaus, A., 1970b. Fische des Indischen Ozeans.... VII. Percomorphi (1). – 'Meteor' Forsch.-Ergebnisse, D (6): 43 - 55, 17 fig.

Illustrated recent otoliths: *Epinephelus diacanthus*, *Flagelloserranus meteori*, *Pseudochromis punctatus*, *Grammistes sexlineatus*.

Kotthaus, A., 1970c. Fische des Indischen Ozeans.... VIII. Percomorphi (2). – 'Meteor' Forsch.-Ergebnisse, D (6): 56 - 75, 27 fig.

- Illustrated recent otoliths: *Apogon semiornatus*, *Pristiapogon frenatus*, *Jaydia smithi*, *J. queketti*, *J. striata*, *Ostorhynchus fleurieu*, *O. endekataenia*, *O. nitidus*, *O. micromaculatus*, *Bentuviaichthys nigrimentum*, *Synagrops adeni*.
- Kotthaus, A., 1972a. Die meso- und bathypelagischen Fische der 'Meteor'-Rossbreiten-Expedition 1970 (2. und 3. Fahrtabschnitt). - 'Meteor' Forsch.-Ergebnisse, D (11): 1 - 28, 113 fig.
- In this paper the author gives illustrations of 134 species of mesopelagic fishes from the surroundings of the Canary Islands. Although some specimens are somewhat affected by formalin and all specimens are photographed without previous coloration, this is a valuable document for the knowledge of otoliths of mesopelagic fishes of the north-east Atlantic.
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- Illustrated recent otoliths: *Electrona rissoi*, *Bentosema suborbitale*, *B. fibulatum*, *Hygophum proximum*, *Myctophum aurolaternatum*, *M. nitidulum*, *M. brachygnathum*, *M. selenops*, *Symbolophorus evermanni*, *S. rufinus*, *Notolychnus valdiviae*, *Paralampanyctus ater*, *Lampanyctus nobilis*, *L. intricarius*, *L. alatus*.
- Kotthaus, A., 1973. Fische des Indischen Ozeans.... X. Percomorphi (3). - 'Meteor' Forsch.-Ergebnisse, D (16): 17 - 32, 16 fig.
- Illustrated recent otoliths: *Bathylupea hoskynii*, *Pelontrus morgansi*, *Xenanthias intermedius*, *Chelidoperca occipitalis*.
- Kotthaus, A., 1974a. Die Fische des Indischen Ozeans.... XI. Percomorphi (4). - 'Meteor' Forsch.-Ergebnisse, D (17): 33 - 54, 25 fig.
- Illustrated recent otoliths: *Acropoma japonicum*, *Lactarius lactarius*, *Selar crumenophthalmus*, *Lutianus kasmira*.
- Kotthaus, A., 1974b. Fische des Indischen Ozeans.... XII. Percomorphi (5). - 'Meteor' Forsch.-Ergebnisse, D (18): 44 - 54, 10 fig.
- Illustrated recent otolith: *Nemipterus japonicus*.
- Kotthaus, A., 1975. Fische des Indischen Ozeans.... XVI. Percomorphi (6). - 'Meteor' Forsch.-Ergebnisse, D (21): 30 - 53, 21 fig.
- Illustrated recent otoliths: *Otolithes cuvieri*, *Johnieops dussumieri*.
- Kotthaus, A., 1976. Fische des Indischen Ozeans.... XVII. Percomorphi (7). - 'Meteor' Forsch.-Ergebnisse, D (23): 45 - 61, 15 fig.
- Illustrated recent otolith: *Cirrhitichthys aureus*.
- Kotthaus, A., 1977a. Fische des Indischen Ozeans.... XIX. Percomorphi (9). - 'Meteor' Forsch.-Ergebnisse, D (25): 24 - 44, 22 fig.
- Illustrated recent otolith: *Benthodesmus spec.*
- Kotthaus, A., 1977b. Fische des Indischen Ozeans.... XX. Pleuronectiformes (Heterosomata). - 'Meteor' Forsch.-Ergebnisse, D (26): 1 - 20, 24 fig.
- Illustrated recent otolith: *Symphurus? gilesi*.
- Kotthaus, A., 1979. Fische des Indischen Ozeans.... XXI. Diverse Ordnungen. - 'Meteor' Forsch.-Ergebnisse, D (28): 6 - 54, 62 fig.
- Illustrated recent otoliths: *Echiodon* sp., *Pyramodon ventralis*, *Diaphus problematicus*, *D. malayanus*, *D. garmani*, *D. jenseni*, *D. phillipsi*, *D. fragilis*, *D. parri*, *D. brachycephalus*.
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 Illustrated recent otoliths: *Conger conger*, *Trisopterus capellanus*, *Oligopus ater*, *Ophidion barbatum*, *Atherina presbyter*, *Pagellus bogaraveo*, *P. erythrinus*, *Trachurus picturatus*, *Argyrosoma regia*, *Diplodus vulgaris*, *Trachinus vipera*, *Arnoglossus imperialis*, *Ammodytes lanceolatus*.
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 Illustrated recent otoliths: *Aphanius (Aphanius) sophiae*, *A. (A.) anatoliae*, *A. (A.) chantrei*, *A. (Kosswigichthys) asquamatus*, *A. (A.) iberus*.
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Nolf, D., in print. Contribution à l'étude des otolithes des poissons, III. Arguments nouveaux pour le classement des poissons Ophidioides dans l'ordre des Gadiformes. – Bull. Inst. r. Sci. nat. Belg.,

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New fossil species: *Muraenesox spatulus*, Genus *Synodontidarum intermedius*, Genus *Ophidiidarum spinosus*, *Chanda bohlkei*, *Mene sekharani*.

Illustrated recent otoliths: *Muraenesox cinerus*, *M. talabon*, *Saurida recta*, *S. tumbil*, *S. parri*, *Aulopus cadenati*, *Platycephalus macracanthus*, *Chanda ambassis*, *Paralabrax nebulifer*, *Mene maculata*, *Mullus surmuletus*, *Sphyræna pinguis*, *Solea solea*.

Nolf, D. & H. Lapierre, 1977. Les otolithes de Téléostéens des sables coquilliers du Bois-Gouët (Eocène de Bretagne). – Biol. Jb. Dodonaea, 44 (1976): 256 - 268, pl. 1 - 2.

New fossil species: *Atherina margereli*, *Ammodytes vasseuri*.

Illustrated recent otoliths: *Monocentris japonicus*, *Atherina presbyter*, *Kuhlia rupestris*, *Emmelichthys nitidus*, *Orthopristis chrysoptera*, *O. ruber*, *Xenistius californiensis*, *Ammodytes lanceolatus*.

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New fossil species: 'genus *Clupeidarum*' *schultzi*, 'genus *Caproidarum*' *sonodae*, 'genus *Chandidarum*' *inflatus*, 'genus *Chandidarum*' *steurbauti*, *Morone eschmeyer*, 'genus aff. *Gazza*' *pentagonalis*, 'genus *Leiognathidarum*' *bercherensis*, *Orthopristis trewavasae*, *Parapristipoma bavayi*, *Pagellus folletti*, *Toxotes wheeleri*, *Cepola massiva*, 'genus *Opisthognathidarum*' *bloti*, 'genus *Blenniidarum*' *blondeaui*, *Haliophis colletti*, *Callionymus lerenardi*, 'genus *Bothidarum*' *biaculeatus*, 'genus *Soleidarum*' *schultzei*.

Illustrated recent otoliths: *Osmerus eperlanus*, *Pterothrissus gisu*, *Gymnothorax saxicola*, *G. nigromarginatus*, *Arndha zebra*, *Notacanthus mosleyi*, *N. sexspinis*, *Rhinomuraena quaesita*, *Paraconger californiensis*, *Chirocentrus dorab*, *Etrumeus sadina*, *Konosirus punctatus*, *Pellona harroweri*, *P. hoevenii*, *Arius planus*, *Siremba imberbis*, *Capros aper*, *Chanda nalu*, *Velifer hypselopterus*, *Moharra rhombea*, *Leiognathus rivulatus*, *Gazza minuta*, *Gerres argyreus*, *Leiognathus splendens*, *Haemulon flavolineatum*, *H. plumieri*, *H. aurolineatum*, *H. bonariensis*, *H. parrai*, *H. sciurus*, *Parapristipoma octolineatum*, *Pagellus natalensis*, *Toxotes jaculator*, *Blennius sanguinolentus*, *Atrosalarias fuscus*, *Opisthognathus rhomaleus*, *Congrogadus subducens*, *Haliophis guttatus*, *Callionymus richardsoni*, *C. lyra*.

Nolf, D. & J. Martinell, in print. Otolithes de Téléostéens du Pliocène des environs de Figueras (Catalogne). – Geologica et Paleontologica,

New fossil species: *Ariosoma coheni*, *Gnathophis kanazawai*.

Illustrated recent otoliths: *Panturichthys mauritanicus*, *Harengula chupeola*, *Electrona risso*, *Myctophum punc-*

- tatum*, *Ceratoscopelus maderensis*, *Diaphus metopoclampus*, *Diaphus holti*, *D. rafinesquei*, *D. mollis*, *D. fragilis*, *D. problematicus*, *Micromesistius poutassou*, *Belone belone*, *Parascombrops pseudomicrolepis*, *Polydactylus virginicus*.
- Nolf, D. & F. Steurbaut, 1979. Les otolithes de Téléostéens des faluns sallomaciens d'Orthez et de Sallespisse (Miocène Moyen d'Aquitaine méridionale, France). – *Paleontographica*, Abt. A, 164 (1 - 3): 1 - 23, 2 fig., pl. 1 - 5.
New fossil species: *Ilisha nijsseni*, *Diplodus karrerae*.
Illustrated recent otoliths: *Ilisha africana*, *Sardinella longiceps*, *S. anchovia*, *Sprattus sprattus*, *Hyporhamphus melanochir*, *Arrhamphus sclerolepis*, *Trachurus mediterraneus*, *Morone labrax*, *Brachydeuterus auritus*, *Diplodus annularis*, *D. senegalensis*, *Pomadourus incisus*, *Pagellus erythrinus*, *Pagrus pagrus*, *Dentex (Cheimerius) gibbosus*, *Argyrosoma regia*, *Galeoides decadactylus*, *Polynemus plebeius*, *Sphyræna piscatorum*, *Trachinus draco*, *Acenotrogobius koumansii*, *Gobius geniporus*, *Arnoglossus imperialis*.
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Illustrated recent otoliths: *Plectrypops lima*, *Myripristis jacobus*, *M. murdjan*, *Otolithes ruber*, *Johnieops aneus*, *Pteroscion peli*, *Pseudotolithus elongatus*, *P. senegalensis*, *Umbrina cirrhosa*, *U. roncadore*, *Argyrosoma hololepidota*, *Cynoscion virescens*, *Ctenosiaena gracilicirrhus*, *Holocentrus rufus*, *Adioryx rubrum*.
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New fossil species: *Paleosciaena mizunamiensis*.
- Ohe, F., 1976b. Comparative material to the fossil fishes from the Tertiary formations in Tokai region, Japan: the otoliths of the deep water fishes of the Seas of Enshu and Kumano. – *Bull. Asahino Senior High School.*, 3: 105 - 126, 58 fig.
Illustrated recent otoliths: *Chlorophthalmus albatrossis*, *Ateleopus japonica*, *Beryx splendens*, *Gephyroberyx japonicus*, *Hoplostethus mediterraneus*, *Polymixia japonica*, *Zen itea*, *Parazen pacificus*, *Zenion pacificum*, *Rexea solandri*, *Istiognathus rivulatus*, *Psenopsis anomala*, *Upeneus bensasi*, *Cepola schlegelii*, *Branchiostegus japonicus auratus*, *Epigonus atherinoides*, *Apogon lineatus*, *Apogonichthys carinatus*, *Neoscombrops analis*, *Priacanthus boops*, *Acropoma japonicus*, *A. hanedai*, *Scombrops boops*, *Quinquarius japonicus*, *Malakichthys wakiaii*, *M. elegans*, *Nippon spinosus*, *Chelidoperca hirundinacea*, *Musterichthys gracilis*, *Owstonia grammodon*, *Neobythites fasciatus*, *N. sivicolus*, *Homostolus japonicus*, *Uranoscopus japonicus*, *Triacanthodes anomalus anomalus*, *Setarches longimanus*, *Chascanopsetta lugubris*, *Physiculus japonica*, *Chaunax fimbriatus*.
- Ohe, F., 1976c. Comparative recent material to the fossil fishes from the Tertiary formations in Tokai region, Japan: The otoliths of the deep water fishes of the Seas of Kumano and Enshu. – 'Kaseki notomo', Rep. pub. Fossil Soc., 14: 17 - 22, 23 fig.
Illustrated recent otoliths: *Pterothrissus gissu*, *Yarrella elongata*, *Hypomesus japonicus*, *Polyipnus stereope*, *Aulopus japonicus*, *Neoscopelus macrolepidotus*, *N. microchir*, *Diaphus elucens*, *Ateleopus japonicus*, *Ophichthus urolophus*, *Beryx decadactylus*, *Zalantias azumanus*, *Epinephelus septemfasciatus*, *Malakichthys elegans*, *Caranx equula*, *Sebastes scythropus*, *Helicolenus hilgendorfi*, *Coelorhynchus kamoharai*, *C. kishinoueii*, *Coryphaenoides nasutus*, *Hymenocephalus striatissimus*, *Ventrifossa garmani*.
- Ohe, F., 1976d. Comparative recent material to the fossil fishes from the Tertiary formations in Tokai region, Japan (3): The otoliths of the deep water fishes of the Seas of Kumano and Enshu. – 'Kaseki notomo', Rep. pub. Fossil Soc., 15: 9 - 15, 40 fig.
Illustrated recent otoliths: *Anago anago*, *Conger japonica*, *Macrohamphosus japonicus*, *Xenolipidichthys dalgleishi*, *Storomateoides sinensis*, *Psenopsis anomala*, *Taius tumifrons*, *Paraparsis aurantica*, *P. minasedna*, *P. sexfasciata*, *Champsodon guentheri*, *C. snyderi*, *Hexagrammos otakii*, *Uranoscopus oligolepis*, *Synchiropus altivelis*, *Chaeturichthys hexanema*, *Acanthogobius flavimanus*, *Antigonia capros*, *Macrorhamphasodes uradoi*, *Neosebastes entaxis*, *Bembras japonicus*, *Lepidotrigla microptera*, *L. guntheri*, *Peristedion orientale*, *Satyrichthys amiscus*, *Kareius bicoloratus*, *Poecilopsetta plinthus*.
- Ohe, F., 1977a. Otoliths from Dainichi sand and Hosoya tuffaceous beds of Kakegawa Group (Pliocene), Shizuoka Prefecture, Central Japan. – 'Kaseki notomo', Tokai Fossil Soc., 16: 13 - 19, 56 fig.

Ohe, F., 1977b. Otoliths of coastal fishes of Ise Bay and Kumanonada. – Bull. Asahino Senior High School., 4: 149 - 158, 51 fig.

Illustrated recent otoliths: *Amphiprion xanthurus*, *Chrysiptera hollisi*, *Amphiprion ocellaris*, *Duymaeria flagellifera*, *Choerodon azurio*, *Prionurus microlepidotus*, *Chaetodon nippon*, *C. vagabundus*, *Stephenolepis cirrifer*, *Lagocephalus lunaris*, *Canthigaster rivulatus*, *Fugu rubripes*, *Pterois lunulata*, *Sebasticus marmoratus*, *Sebastes inermis*, *Scorpaena neglecta miostoma*, *Inimicus japonicus*, *Hoplichthys fasciatus*, *Pseudoblennius percoides*, *Pseudoblennius cottides*, *Hippoglossoides dubius*, *Pleuronectes* sp., *Zebrias japonicus*, *Zebrias* sp., *Cynoglossus joyneri*, *Spratelloides japonicus*, *Saurida tumbil*, *Synodus variegatus*, *Chlopsis fierasfer*, *Conger myriaster*, *Conger* sp., *Hippocampus takakurei*, *Fistularia petimba*, *Lepidocybium flavobrunneum*, *Rachycentron canadum*, *Parupeneus indicus*, *Histioporus typus*, *Apogon endekataenia*, *Priacanthus macracanthus*, *Micropterus salmoides*, *Aulacocephalus temminckii*, *Epinephelus fasciatus*, *Sacura margaritacea*, *Erythrocles schlegelii*, *Haplogeny nigrispinnis*, *Goniistius zebra*, *G. zonatus*, *Bembrops filodorsalis*, *Calliurichthys japonicus*, *Dascyllus trimaculatus*.

Ohe, F. & Y. Araki, 1973. Some Miocene fish otoliths from the Yakuoji Formation, Tsu, Mie Prefecture. – Sci. Rep. Tohoku Univ. Geol., 6: 407 - 413, pl. 49.

New fossil species: *Diaphus angulatus*, *D. hataii*, *Lampanyctus kuboensis*, *Hygophum rotundum*, *Notacanthus circulus*, *Coelorhynchus yakuojiensis*.

Ojaveer, E., 1962. [On differentiation on the herring seasonal races in the North Eastern Baltic by means of otoliths]. Jzv. – Akad. Nauk. Est. SSR, ser. biol., 11 (3): 193 - 208, 3 fig., 2 microph. (in Russian, with English summary). Illustrated recent otolith: *Clupea harengus membras*.

Pana, I., 1977. Problems arisen by the appearance of the new otoliths species and their stratigraphical implications. Examples of Dacian otoliths from S. Dobrudja. – An. Univ. Bucuresti, Geol., 26: 105 - 124, 4 fig., pl. 1 - 5.

New fossil species: *Gobius gibbosus*, *Sciaena moguntiniformis*, *Corvina rumana*, *C. dobrogica*, *C. dacica*.

Pana, I. & D. Pana, 1978. La valeur biostratigraphique des otolithes pliocènes. – Rev. Roum. Géol. Géophys. et Géogr., Géologie, 22: 103 - 119, 2 fig.

Panella, G., 1971. Fish otoliths: daily growth layers and periodical patterns. – Science, 173: 1124 - 1127, 2 fig.

Illustrated recent otolith: *Merluccius bilinearis*.

Palmork, K. H. & M. E. U. Taylor, 1963. The crystal structure of aberrant otoliths. – Acta Chem. Scand., 17 (5): 1457 - 1458, 2 fig.

Pinkas, L., M. S. Oliphant & I. L. K. Iverson, 1971. Food habits of Albacore, bluefin tuna, and Bonito in California Waters. – Fish Bull., 152: 3 - 105, 50 fig.

Illustrated recent otoliths: *Engraulis mordax*, *Cololabis saira*, *Tarletonbeania crenularis*.

Post, A. & T. Hecht, Results of the research cruises of the F.R.V. 'Walt Herwig' to South America, 49. The otoliths of *Diretmus Johnson*, 1863 (Osteichthyes, Beryciformes, Diretmidae). – Mitt. Hamburg Zool. Mus. Inst., 74: 165 - 170, 3 fig.

Illustrated recent otoliths: *Diretmus argenteus*, *D. pauciradiatus*.

Priol, E. P., 1932. Remarques sur les espèces de Grondins les plus communs des côtes de France. – Revue Trav. Off. (scient. tech.) Pêch. marit., 5 (2): 223 - 257.

Illustrated recent otoliths: *Trigla lucerna*, *Aspitrigla cuculus*, *Eutrigla gurnardus*, *Trigloporus lastoviza*.

Quinet, G. E., P. Coupataz & G. Wouters, 1970. Note préliminaire sur la faune ichthyologique et les otolithes de l'Ypresien belge de Montroëul-au-Bois, en Hainaut, Belgique. – Bull. Inst. r. Sci. nat. Belg., 46 (33): 1 - 6, pl. 1 - 2.

Rado, G., 1965. Otolite din depozitele Tortoniene de la costeiul de Sus. – An. Univ. Bucuresti (Ser. Geol. Geogr.), 14: 55 - 71, 3 fig., pl. 1 - 5.

Rado, G., 1968. Etude des otolithes sarmatiens de Copăcel-Chijic (Bassin du Crisul Repede). – Trav. Mus. Hist. nat. Grigore Antipa, 8: 581 - 585, 1 fig., pl. 1 - 5.

Rado, G., 1969. Grupe noi de organisme in fauna Tortoniană de la Buituri. – St. si. cerc. de geol. geof. geogr., (Seria Geologie), 14 (1): 189 - 204, pl. 1 - 2.

- Rado, G., 1971. Otolite în depozitele Miocene din forajele de la Islaz. – Bul. Soc. Stiinte Geologice România, 13: 179 - 194, 1 fig., pl. 1 - 9.
- Raitt, D. S. & V. O. Sagua, 1969. Preliminary investigations of the biology of *Brachydeuterus auritus* (Val., 1831), in Nigerian waters. – Actes symp. océano. et ress. halieut. Atlantique tropical (Abidjan, 1966), Unesco, Paris, 1969: 397 - 401.
- Illustrated recent otolith: *Brachydeuterus auritus*.
- Rannou, M., J. G. Nielsen & J. C. Hureau, 1975. Note sur quelques Aphyonidae de l' Atlantique Nord (Téléostéens, Ophidioidei). – Bull. Mus. natl. Hist. nat. Paris (3^e sér.), 247 (1974): 1249 - 1257, 4 fig.
- Illustrated recent otoliths: *Aphyonus gelatinosus*, *Leucochlamys galathea*.
- Rannou, M. & C. Thiriot-Quievreux, 1975. Structure des otolithes d' un Macrouridae (poisson gadiforme) bathyal. Etude au microscope électronique à Balayage. – Ann. Inst. Océanogr., Paris, 1975, 51 (2): 195 - 201.
- Robba, E., 1970. Otoliti del Tortoniano-tipo (Piemonte). – Riv. Ital. Paleont., 76 (1): 89 - 172, pl. 8 - 16.
- New fossil species: *Myctophum rossiae*, *Hygophum agatense*, *Gadus robustus*, *Glyptorhynchus triangulus*, *Holocentrus? weileri*, *Bauzaia tuberosa*, *B. ornaticissima*, *Porichthys pedemontanus*.
- Rosenblatt, H. & A. Bell, 1976. Osteology and relationships of the roosterfish, *Nematistius pectoralis* Gill. – Los Angeles County Mus. Contrib. in Sci., 279: 1 - 23, 18 fig.
- Illustrated recent otoliths: *Nematistius pectoralis*, *Caranx marginatus*.
- Rosenblatt, R. & I. Rubinoff, 1972. *Pythonichthys asodes*, a new Heterenchelyid eel from the Gulf of Panama. – Bull. Marine Sci., 22 (2): 355 - 364, 3 fig.
- Illustrated recent otolith: *Pythonichthys asodes*.
- Sasaki, H., 1967. The function of the otolith organs. – Yonago Acta Med., 11: 133 - 140.
- Schäfer, W., 1962. Pisces. In: W. Schäfer, 1962. Aktuo-Paläontologie, nach Studien in der Nordsee. Frankfurt am Main (Waldemar Kramer): 59 - 104.
- Schmidt, W., 1968. Vergleichend morphologische Studie über die Otolithen mariner Knochenfische. – Arch. Fischereiwiss., 19 (1): 1 - 96, pl. 1 - 25.
- This paper gives illustrations of 186 species of otoliths of marine fishes from the East Atlantic, from the Baltic Sea to the Gulf of Guinea. Each otolith is represented by a schematical drawing and a photograph, unfortunately made without previous coloration of the specimens.
- Schott, J. W., 1969. A technique for producing and mounting otolith wafers for age determination. – Calif. Fish and Game, 55 (1): 86 - 88, 2 fig.
- Schwarzahns, W., 1972. Der Wert von morphologischen Merkmalen der Teleosteer-Otolithen (Sagitta) für höhere systematische Rangstufen (mit Beispielen und Problemfragen). – Meded. Werkgr. Tert. Kwart. Geol., 9 (3/4): 106 - 116.
- Schwarzahns, W., 1973. Einige Otolithen aus dem Unteroligozän von Hückelhoven unter besondere Berücksichtigung der Evolution der Trachinidae. – Meded. Werkgr. Tert. Kwart. Geol., 10 (2): 31 - 43, pl. 1 - 2.
- New fossil species: *Apogonidarum ventrolobatus*, *Callionymus schuermanni*, *Bothidarum rhomboides*, *Trachinus gaemersi*.
- Schwarzahns, W., 1974. Die Otolithen-Fauna des Chatt A und B (Oberoligozän, Tertiär) vom Niederrhein, unter Einbeziehung weiterer Fundstellen. – Decheniana, 126 (1/2): 91 - 132, 78 fig., pl. 1 - 3.
- New fossil species: *Notogenous brevirostris*, *Trisopterus kasselensis*, *Macrurus rectangularis*, *Serranus krefeldensis*, *Mupus neumanni*, *Pagrus gaemersi*, *Scombridarum bisculptatus*, *Bothidarum weileri*, inc. sed. *tenuicauda*.
- Schwarzahns, W., 1976. Die fossilen Otolithen der Gattung Bathycongrus (Meer-Aale; Congridae, Pisces). – Senckenb. Lethaea, 56 (6): 469 - 477, 4 fig.
- New fossil species: *Bathycongrus twistringenensis*.
- Illustrated recent otolith: *Congermuraena bowersi*.
- Schwarzahns, W., 1977. Otolithen aus dem Unteroligozän (Tertiär) von Hückelhoven (Kreis Heinsberg, Nordrhein-Westfalen). – Decheniana, 130: 268 - 292, 34 fig.
- New fossil species: *Osmeridarum rectidorsalis*, *?Saurida indansi*, *Phycis praecognatus*, *Bregmaceros oblongus*, inc. sed. *spinus*.

- Schwarzahns, W., 1978. Otolith-morphology and its usage for higher systematical units with special reference to the Myctophiformes s.l. – Meded. Werkgr. Tert. Kwart. Geol., 15 (4): 167 - 185, 9 fig., pl. 1 - 3.
 Illustrated recent otoliths: *Elops hawaiiensis*, *Megalops cyprinoides*, *Chlorophthalmus nigripinnis*, *C. agassizi*, *Aulopus curtirostris*, *Saurida tumbil*, *S. undosquamis*, *Synodus variegatus*, *S. luciopes*, *Trachinocephalus myops*, *Bathypterois longifilis*, *Scopelosaurus harryi*, *S. lepidus*, *Ipnops* sp., *Harpodon translucens*, *Benthalbella macropinna*, *Sudis jayakara*, *Omosudis lowei*, *Paralepis atlanticus*, *Diaphus rafinesquei*, *Neoscopelus microchir*, *N. macrolepidotus*, *Aphyonius gelatinosus*, *Onuxodon margaretiferae*, *Lepophidium prorates*, *Neobythites marginatus*, *Dipulus caecus*, *Holcomycteronus pterotus*, *Genypterus blacodes*, *Brotula barbata*, *Phycis* sp., *Gadiculus argenteus*, *Coelorhynchus carminatus*, *Hymenocephalus* sp., *Chalinura leptolepis*, *Bathygadus novus*.
- Schwarzahns, W., 1979. Otolithen aus dem Unter-Pliozän von Süd-Sizilien und aus der Toscana. – Berliner geowiss. Abh., 1978 (A) 8: 1 - 52, 4 fig., pl. 1 - 13.
 New fossil species: *Myctophum unicum*, *Diaphus crassus*, *Gymnoscopelus fitchi*, *Hygophum agrigentensis*, *Hygophum? orcianensis*, *Electrona anfossimosnai*, *Micromesistius boscheineni*, *Nezumia contemplata*, *Heptocara pauper*, *Brotulidarum cetonaensis*, *Gobius truncatus*, *Citharopsettodes angustus*.
 Illustrated recent otoliths: *Myctophum aurolaternatum*, *M. punctatum*, *Symbolophorus evermanni*, *Benthosema glaciale*, *B. fibulata*, *Diaphus theta*, *Lobianchia dofleini*, *L. gemellari*, *Gymnoscopelus fraseri*, *Ceratoscopelus townsendi*, *Hygophum atratum*, *Triphoturus mexicanus*, *Protomyctophum crockeri*, *Gadiculus argenteus argenteus*, *Coelorhynchus carminatus*, *C. scaphopsis*, *C. fasciatus*, *C. coelorhynchus*, *C. australis*, *Lepidorhynchus denticulatus*, *Ventrifossa occidentalis*, *Nezumia bairdi*, *N. convergens*, *N. nigromaculata*, *N. aequalis*, *N. orbitalis*, *Coryphaenoides acrolepis*, *Macrourus berglax*, *Coryphaenoides rupestris*, *Hymenocephalus striatissimus*, *H. italicus*, *H. sp.*, *Albatrossia pectoralis*, *Trachyrhynchus trachyrhynchus*.
- Scuderi, I., 1957. Sui caratteri morfologici dell' Engraulis del 'Lago Verde'. – Boll. Pesca Piscic. Idrobiol., 12 (2): 232 - 264, 7 fig.
 Illustrated recent otolith: *Engraulis encrasicolus*.
- Sieber, R. & E. Weinfurter, 1967. Otolithen aus tiefen Gosauschichten Österreichs. – Ann. Naturhistor. Mus. Wien, 71: 353 - 361, pl. 1.
 New fossil species: *Otolithus (Percidarum) transitus*, *O. (inc. sed.) weinbergeri*.
- Skalkin, V. A., 1961. Otolity treskovykh ryb (sem. Gadidae) dalnevostotchnykh morei (The otoliths of Gadidae from seas of the Far East). – Vopr. Ikhtologii, 1, 2 (19): 286 - 289.
 Illustrated recent otoliths: *Eleginus gracilis*, *Gadus morhua macrocephalus*, *Theragra chalcogramma*.
- Skalkin, V. A., 1963. Otolity nekotorykh ryb dalnevostotchnykh morei (The otoliths of some fishes from seas of the Far East). – Izv. tikho-ok. nauch. ék. Inst. ryb. Khoz. okeanog., 49: 159 - 199, 46 fig., pl. 1 - 9.
 Illustrated recent otoliths: *Clupea harengus pallasii*, *Engraulis japonicus*, *Oncorhynchus gorbusha*, *Salvelinus leucomaenis*, *S. malma*, *Hypomesus olidus*, *Leuciscus brandti*, *Gasterosteus aculeatus*, *Cololabis saira*, *Trichiurus japonicus*, *Sebastodes taczanowskii*, *S. alutus*, *Sebastobus alascanus*, *Anoplopoma fimbria*, *Hexagrammus octogrammus*, *Pleurogrammus azonus*, *Myoxocephalus* sp., *M. verrucosus*, *Hemitripterus villosus*, *Gymnancistrus herzensteini*, *Triglops beani*, *Icelus spiniger*, *Artediellus pacificus*, *Podothecus acipenserinus*, *P. gilberti*, *Liparis pulchellus*, *Hippoglossoides elassodon elassodon*, *Atheresthes evermanni*, *A. stomias*, *Hippoglossus stenolepis*, *Lepidopsetta bilineata*, *Limanda aspera*, *Liopsetta obscura*, *Glyptocephalus stelleri*, *Stichaeus grigorjevi*, *S. nozawae*, *Bathymaster signatus*, *Lycodes palearcticus*, *Hypoptichus dybowski*, *Coryphaenoides* sp.
- Smigielska, T., 1973. Fish otoliths from the Lower Tortonian deposits at Niskowa near Nowy Sacz. – Ann. Soc. Géol. Pol., 43 (1): 3 - 40, 5 fig., pl. 1 - 5.
 New fossil species: *Otolithus (Cottidarum) modestus*, *Arnoglossus inconspicuous*.
- Spratt, J. D., 1975. Anomalous otoliths from the northern anchovy, *Engraulis mordax*. – Calif. Fish and Game, 61 (4): 235 - 236, 1 fig.
- Stancu, J., 1970. Otolite sarmatiene de la Soceni (Banat-România). – Dări Seamă Sedint., 16 (3) (1968-1969): 5 - 24, 4 fig., pl. 1 - 11.
- Steurbaud, E., 1979a. Otolithes de Téléostéens de quelques formations continentales d'âge Aquitanien du midi de la France. – Bull. Soc. belge Géologie, 87 (3): 179 - 188, 1 pl.
 New fossil species: 'genus *Umbridarum*' *ringeadei*, 'genus *Cyprinodontidarum*' *angulosus*, 'genus *Cyprinodontoi-*

deorum' *labretensis*, 'genus *Cyprinodontoideorum*' *obesus*.

Illustrated recent otoliths: *Umbrakrameri*, *Lebistes reticulatus*, *Umbrapygmaea*.

Steurbaut, E., 1979b. Les otolithes de Téléostéens des Marnes de Saubrigues (Miocène d' Aquitaine méridionale, France). - *Palaeontographica*, Abt. A (166): 48 - 91, pl. 1 - 12.

New fossil species: 'Genus aff. *Lemkea*' *saubriguensis*, 'Genus aff. *Valenciennellus*' *kotthausi*, *Saurida rectilineata*, *Symbolophorus meridionalis*, *Diaphus cahuzaci*, *D. poignantae*, *Adioryx ostialis*, *Myripristis verus*, 'Genus aff. *Lepidotrigla*' *postdorsalis*, 'Genus *Triglidarum*' *parvulus*, *Neoscombrops flexuosus*, *Dentex (Polysteganus) nolfi*, *Bembrops vandeveldeae*, 'Genus *Perciformorum*' *wheeleri*.

Illustrated recent otoliths: *Lemkea heterolinea*, *Promyllantor macroporis*, *Maurolicus muelleri*, *Vinciguerria poweria*, *V. lucetia*, *Symbolophorus veranyi*, *Diaphus debilis*, *Lobianchia dofleini*, *Bolinichthys supralateralis*, *Diaphus dumerili*, *Bolinichthys indicus*, *Diaphus metopoclampus*, *D. garmani*, *Gadiculus argenteus*, *Physiculus huloti*, *P. roseus*, *P. kaupi*, *P. argyropastus*, *P. rastrelliger*, *P. peregrinus*, *Leuresthes tenuis*, *Atherinopsis californiensis*, *Brotula barbata*, *Gephyroberyx darwini*, *Adioryx hastatus*, *Antigonia capros*, *Pristigynys niphonia*, *Parascombrops philippinensis*, *P. microlepis*, *Synagrops japonicus*, *Epigonus telescopus*, *Dactyloptena papilio*, *Pagellus coupei*, *Bembrops greyi*, *B. heterurus*, *Lesueurigobius saenzoi*, *L. friesii*, *Acentrogobius koumansii*, *Lepidopus caudatus*, *Hyperoglyphe japonicus*, *Paraplagusia japonica*.

Steurbaut, E., in print. Deux nouveaux gisements à otolithes de Téléostéens, dont une espèce nouvelle, dans l' Aquitanien continental du Midi de la France. - *Géobios*, short notes.

New fossil species: 'Genus *Cyprinodontidarum*' *feistae*.

Steurbaut, E. & J. Herman, 1978. Biostratigraphie et poissons fossiles de la formation de l' Argile de Boom (Oligocène Moyen du bassin belge). - *Géobios*, 11 (3): 297 - 325, 3 fig., pl. 1 - 3.

New fossil species: 'Genus *Gadidarum*' *ensiformis*.

Illustrated recent otolith: *Trisopterus luscus*.

Stinton, F. C., 1968. On the study of Tertiary fish otoliths. - *Mém. B.R.G.M.*, 58: 153 - 162, 1 pl.

Illustrated recent otoliths: *Esox lucius*, *Pterothrissus gissu*, *Hilia* sp., *Netuma thalassina*, *Merluccius vulgaris*, *Trachichthodes affinis*, *Beryx decadactylus*, *Lutianus maltzani*, *Pelamys sarda*.

Stinton, F. C., 1973. Fish otoliths from the English Cretaceous. - *Paleontology*, 16 (2): 293 - 305, 1 fig., pl. 31.

New fossil species: *Megalops bicrenulatus*, *Albula obesa*, *Osmerus lobatus*, *Sphaeronchus rotundus*.

Illustrated recent utriculiths: *Notopterus notopterus*, *Gaterin gaterinus*, *Esox lucius*.

Stinton, F. C., 1975. Fish otoliths from the English Eocene, I. *Palaeontogr. Soc. [Monogr.]*: 1 - 56, 12 fig., pl. 1 - 3.

New fossil species: *Albula raphiodon*, *A. hantoniensis*, *A. marginalis*, *A. incurvata*, *Pterothrissus protensus*, *P. cristatus*, *P. leiodus*, *Anguilla annosa*, *Muraena prima*, *Moringua explicata*, *Nettastoma crenulatum*, *Conger productus*, *C. extensus*, *Astroconger crassus*, *A. ellipticus*, *Paraconger calvus*, *Lemkea glabra*, *L. aftonensis*, *Promyllantor impletus*, *P. fastigatus*, *P. guttulatus*, *P. similis*, *Gnathophis obesus*, *Uroconger incisurus*, *U. emarginatus*, *Echelus contractus*, *E. crenulatus*, *Ophichthus sphaeroides*, *Myrichthys brevis*.

Illustrated recent otoliths: *Dinoperca petersi*, *Gaterin picus*, *Centropyge heraldi*, *C. flavissimus*, *C. nox*, *C. bispinosus*, *C. bicolor*, *C. multispinis*, *C. argii*, *C. tibicen*, *C. vroliki*, *Elops saurus*, *E. affinis*, *E. hawaiaensis*, *Megalops ciprinoides*, *Albula vulpes*, *Lepisosteus osseus*, *Pterothrissus gissu*, *P. belloci*, *Anguilla vulgaris*, *Muraena helena*, *Moringua hawaiaensis*, *Gymnothorax rueppelli*, *Muraenesox cymbium*, *Nettastoma melanura*, *Astroconger myriaster*, *Muraenesox talabon*, *Conger conger*, *C. acutus*, *Paraconger notialis*, *Lemkea heterolinea*, *Promyllantor macroporis*, *Gnathophis mystax*, *Uroconger lepturus*, *U. validus*, *Echelus vulgaris*, *Ophichthus zophochir*, *O. roseus*, *Myrichthys maculosus*.

Stinton, F. C., 1977a. Fish otoliths from the English Eocene, II. *Palaeontogr. Soc. [Monogr.]*: 57 - 126, 12 fig., pl. 4 - 8.

New fossil species: *Chirocentrus exilis*, *Stolephorus productus*, *S. furculus*, *Alosa incisa*, *Pomolobus circularis*, *Harengula similis*, *H. regularis*, *Sardinella spatiosa*, *S. extensa*, *Opisthonema collatum*, *Dussumieria amussa*, *Etrumeus undatus*, *Heterotis acutangulus*, *Chanos compressus*, *Palaeosox densus*, *Umbravalida*, *Alepocephalus novus*, *Osmerus sculptus*, *O. delicatulus*, *O. colvelliensis*, *Ichthyococcus subregularis*, *Aulopus sinuosus*, *Chlorophthalmus elongatus*, *Synodus bisectus*, *Saurida tenuis*, *Polymixia? rhomboidalis*, *P.serta*, *Merluccius nodosus*, *M. apicalis*, *Gadus varians*, *Raniceps elegans*, *Lepidion tuberculatum*, *Trachyrincus minusculus*, *Coelorinchus triquetrus*, *Hymenocephalus fimbriatus*, *Dinematichthys brevisulcus*, *Ogilbia centrota*, *Neohythites constrictus*,

Dermatopsis astrictus, *Neobythites angustus*, *N. scabrosus*, *N. laevis*, *Monomitopus costatus*, *Oligopus gibbosus*, *O. bulbiformis*, *Sirembo convexus*, *Hoplobrotula panda*, *H. undulata*, *H. spissa*, *Xiphiurus nodosus*, *Encheliophis triangularis*.

Illustrated recent otoliths: *Chirocentrus dorab*, *Setipinna taty*, *Stolephorus commersonnii*, *Alosa alosa*, *Pomolobus pseudoharengus*, *Clupea harengus*, *Harengula pensacola*, *Sardinella eba*, *Opisthonema oglinum*, *Dussumieria acuta*, *Etrumeus micropus*, *Dorosoma chacunda*, *Heterotis niloticus*, *Chanos chanos*, *Tachysurus thalassinus*, *Galeichthys felis*, *Umbra limi*, *Argentina silur*, *Alepocephalus tenebrosus*, *Osmerus eperlanus*, *Hypomesus pretiosus*, *Ichthyococcus irregularis*, *Aulopus filamentosus*, *Synodus foetens*, *Saurida tumbil*, *Chlorophthalmus agassizi*, *Polymixia nobilis*, *Merluccius vulgaris*, *Gadus morhua*, *Microgadus proximus*, *Trisopterus luscus*, *Molva vulgaris*, *Raniceps raninus*, *Bregmaceros atripinnis*, *Lepidion eques*, *Trachyrincus trachyrincus*, *Coelorinchus coelorinchus*, *Hymenocephalus italicus*, *Dinematichthys iluocoeteoides*, *Ogilbia cayorum*, *Brosmophycis marginatus*, *Dermatopsis macrodon*, *Neobythites sivicolus*, *Monomitopus metriostoma*, *Selachophidium guentheri*, *Dicrolene introniger*, *Oligopus robustus*, *Brotula multibarbata*, *Sirembo imberbis*, *Hoplobrotula armata*, *Lepophidium cerwinum*, *Xiphiurus capensis*, *Encheliophis gracilis*.

Stinton, F. C., 1977b. Teleost otoliths from the Harefield Beds (Paleocene: Oldhaven Formation) at Bignell's Corner, Herts. - Tertiary Res., 1 (4): 119 - 125, 1 pl.

New fossil species: *Anguilla pectinata*, *Hoplobrotula protensa*.

Stinton, F. C., 1978. Fish otoliths from the English Eocene, III. - Palaeontogr. Soc. [Monogr.]: 127 - 189, pl. 9 - 12.

New fossil species: *Lophius papillosus*, *Antennarius excavatus*, *A. validus*, *A. curvatus*, *A. hamatus*, *A. falcatus*, *Ogcocephalus cirrhosus*, *O. glyptosus*, *Chaunax semiangulatus*, *Hemiramphus ovalis*, *H. subcircularis*, *H. mosaicus*, *Pranesus densus*, *Trachichthys abditus*, *Hoplostethus densus*, *Paratrachichthys angulatus*, *P. cirratus*, *Gephyroberyx hexagonalis*, *Centroberyx rotundus*, *C. elegans*, *C. crenulatus*, *Monocentris cristata*, *Beryx nova*, *Holocentrus extenuatus*, *Myripristis sinuatus*, *M. depressus*, *Capros exiguus*, *C. incisus*, *Chana antiqua*, *Scorpaena regularis*, *Sebastodes perangustus*, *Scorpaenodes recurvus*, *Notosthes flexuosus*, *Paracentropogon annectens*, *Minous excavatus*, *M. carinatus*, *Prionotus contiguus*, *P. tortuosus*, *Trigla? gibbosa*, *Lepidotrigla selsiensis*, *Chelidonichthys curvatus*, *Peristedion prominens*, *Podothecus costulatus*, *Dactyloptena crenata*, *D. orbicularis*, *D. lobata*, *Centropomus annectens*, *Lates delicatulus*, *Chanda rhomboides*, *C. ovalis*, *C. fimbriata*, *C. convexa*, *C. pentagonalis*, *C. lobata*, *C. turgida*, *Dapalis vectensis*, *Morone crassa*, *Centrogenys ornatus*, *Epinephelus nodosus*, *E. constrictus*, *E. plicatus*, *E. exacutus*.

Stinton, F. C. & D. Kissling, 1968. Quelques otolithes de téléostéens de la Molasse oligocène de Suisse occidentale. - C.R. des Séances, S.P.H.N. Genève (N.S.), 3 (3): 140 - 154, 4 fig., 1 pl.

New fossil species: *Cyprinodon subtrigonus*, *C. dentifer*, *Dapalis carinatus*, *D. rhomboidalis*, *Gobius sectus*, *Lepidogobius bifidus*.

Stinton, F. C. & H. S. Torrens, 1968. Fish otoliths from the Bathonian of southern England. - Paleontology, 11 (2): 246 - 258, 14 fig.

New fossil species: *Gyrosteus subdeltoideus*, *Sphaeronychus dorsetensis*, *S. circularis*, *Pholidophorus paradoxicus*, *P. prae-elops*, *Leptolepis tenuirostris*, *L. densus*, *L. rodensis*, *Archengraulis productus*, *Cleidogonia antiqua*.

Sulak, K. J., 1977. *Aldrovandia oleosa*, a new species of the Halosauridae, with observations on several other species of the family. - Copeia, 1: 11 - 20, 8 fig.

Illustrated recent otoliths: *Aldrovandia oleosa*, *A. phalacra*.

Takahashi, M., 1976. Some Miocene fish otoliths from the Mizunami Group, Central Japan. - Bull. Mizunami Foss. Mus., 3: 55 - 72, pl. 16 - 22.

Takahashi, M., 1977. Some Pliocene fish otoliths from the Dainichi Sands, Kakegawa Group, Central Japan. - Bull. Mizunami Foss. Mus., 4: 97 - 118, pl. 23 - 29.

Takai, T., 1959. Studies on the morphology, ecology and culture of the important apodal fishes, *Muraenesox cinereus* (Forsk.) and *Conger myriaster* (Brevoort). - Contr. Shimonoseki College Fish., 285: 8 - 340, 153 fig., 14 pl.

Illustrated recent otoliths: *O. leptognathus*, *Muraenesox cinereus*, *M. yamaguchiensis*, *Anago anago*, *Alloconger anagoides*, *A. shiroanago shiroanago*, *Congrus megastomus*, *Conger myriaster*, *Conger japonicus*, *Rhyncho-*

cymba nystromi nystromi, *Rhynchocymba nystromi ginanago*, *Rhynchoconger ectenura*, *Promyallantor nezumi*, *Japonoconger sivicola*, *Congrina retrotincta*, *Uroconger lepturus*.

Taverne, L., 1968. Ostéologie du genre *Gnathonemus* Gill sensu stricto [*Gnathonemus petersii* (Gthr) et espèces voisines] (Pisces Mormyriiformes). – Ann. Mus. r. Afrique Cent., (sér. in-8^o), (Sci. Zool.), 170: 1 - 91, 44 fig., pl. 1 - 4.

Illustrated recent otolith: *Gnathonemus petersii*.

Taverne, L., 1969. Etude ostéologique des genres *Boulengeromyrus* Taverne et Géry, *Genyomyrus* Boulenger, *Petrocephalus* marcusen (Pisces Mormyriiformes). – Ann. Mus. r. Afrique Cent., (sér. in-8^o), (Sci. Zool.), 174: 1 - 85, 46 fig., pl. 1 - 2.

Illustrated recent otoliths: *Petrocephalus bane*, *Genyomyrus donnyi*, *Boulengeromyrus knoeffleri*.

Taverne, 1971. Ostéologie des genres *Marcusenius* Gill, *Hippopotamyrus* Pappenheim, *Cyphomyrus* Myers, *Pollimyrus* Taverne et *Brienomyrus* Taverne (Pisces Mormyriiformes). – Ann. Mus. r. Afrique Cent., (sér. in-8^o), (Sci. Zool.), 188: 1 - 144, 80 fig., pl. 1 - 3.

Illustrated recent otoliths: *Cyphomyrus psittacus*, *Marcusenius cyprinoides*.

Taverne, L., 1972. Ostéologie des genres *Mormyrus* Linné, *Mormyrops* Müller, *Hyperopisus* Gill, *Isichthys* Gill, *Myomyrus* Boulenger, *Stomatorhinus* Boulenger et *Gymnarchus* Cuvier. Considérations générales sur la systématique des poissons de l'ordre des Mormyriiformes. – Ann. Mus. r. Afrique Cent., (sér. in-8^o), (Sci. Zool.), 200: 1 - 194, 116 fig., pl. 1 - 2.

Illustrated recent otoliths: *Gymnarchus niloticus*, *Stomatorhinus puncticulatus*, *Myomyrus macrops*, *Isichthys henryi*, *Hyperopisus occidentalis tenuicauda*, *Mormyrops deliciosus*, *Mormyrus rume*.

Taverne, L., 1974. L'ostéologie d' *Elops* Linné, C., 1766 (Pisces Elopiformes) et son intérêt phylogénétique. – Acad. r. Belg., Mém. Cl. Sci. Collect. in-8^o, (sér. 2), 41 (2): 5 - 98, 40 fig., 1 pl.

Illustrated recent otolith: *Elops lacerta*.

Taverne, L., 1974. Sur la sagitta des Mormyridae (Pisces Osteoglossomorphes). – Rev. Zool. afr., 88 (2): 281 - 285, 2 fig.

Illustrated recent otoliths: *Marcusenius macrolepidotus*, *Campylomormyrus tamandua*, *Petrocephalus bane*, *Pantodon buchholzi*.

Taverne, L., 1975. A propos de trois Téléostéens fossiles déterminés erronément comme Ostéoglossides, *Cearana* Jordan, D. S. et Branner, J. C., 1908, *Eurychis* Jordan, D. S., 1924 et *Genartina* Frizzell, D. L. et Dante, J. H., 1965. – Ann. Soc. r. Zool. Belg., 105 (1-2): 15 - 30, 8 fig.

Taverne, L., 1977. Ostéologie, phylogénèse et systématique des Téléostéens fossiles et actuels du super-ordre des Ostéoglossomorphes. Première partie. Ostéologie des genres *Hiodon*, *Echiodon*, *Lycopera*, *Osteoglossum*, *Scleropages*, *Heterotis* et *Arapaima*. – Acad. r. Belg., Mém. Cl. Sci., Collect. in-8^o, (sér. 2), 42 (3): 5 - 235, 146 fig. Illustrated recent otoliths: *Arapaima gigas*, *Heterotis niloticus*, *Scleropages formosus*, *Osteoglossum bicirrhosum*, *Hiodon alosoides*.

Taverne, L., 1978. Ostéologie, phylogénèse et systématique des Téléostéens fossiles et actuels du super-ordre des Ostéoglossomorphes. Deuxième partie. Ostéologie des genres *Phareodus*, *Phareoides*, *Brychaetus*, *Musperia*, *Pantodon*, *Singida*, *Notopterus*, *Xenomystus* et *Papyrocranus*. – Acad. r. Belg., Mém. Cl. Sci., Collect. in-8^o, (sér. 2), 42 (6): 4 - 213.

Illustrated recent otoliths: *Papyrocranus afer*, *Xenomystus nigri*, *Notopterus notopterus*, *Pantodon buchholzi*.

Tilak, J., 1963. Studies on the comparative morphology of the otoliths of Indian siluroids. – Geol. Anz., 173 (3): 181 - 201.

Trewavas, E., 1977. The sciaenid fishes (Croakers or Drums) of the Indo-West-Pacific. – Trans. zool. Soc. Lond. (1977), 33: 259 - 541, 61 fig., pl. 1 - 14.

Illustrated recent otoliths: *Bahaba chaptis*, *Umbrina canariensis*, *Kathala axillaris*, *Otolithoides pama*, *O. biau-ritus*, *Panna microdon*, *Boesemania microlepis*, *Pennahia macrophthalmus*, *Argyrosomus hololepidotus*, *A. amoyensis*, *Pterotolithus maculatus*, *P. lateoides*, *Otolithes ruber*, *Chrysochir aureus*, *Daysciaena albida*, *Austro-ni-bea oedogenys*, *Paranibeia semiluctuosa*, *Nibeia maculata*, *N. semifasciata*, *N. soldado*, *Sonorolux fluminis*, *Johnius coitor*, *Sciaena umbra*, *Macrospinosa cuja*, *Bahaba taipingensis*, *Pennahia macrocephalus*, *P. pawak*, *P. argentata*, *Megalonibeia fusca*, *Argyrosomus japonicus*, *A. miuuy*, *Atrobucca nibe*, *A. trewavasae*, *Afroscion thor-*

pei, *Protonibea diacanthus*, *Dendrophysa russelli*, *Nibea albiflora*, *Larimichthys crocea*, *L. polyactis*, *Collichthys lucidus*, *C. niveatus*, *Johnius coitor*, *Atractoscion aequidens*, *Pseudotolithus brachygnathus*, *P. senegalensis*, *P. (Pinnacorvina) epipercus*, *P. (Hostia) moorii*, *P. (Fonticulus) elongatus*, *Miracorvina angolensis*, *P. (P.) senegalensis*, *Pteroscion peli*.

Voigt, E., 1928. Ueber einen Gadidenotolithen und einige andere unbeachtete Fossilien aus der Schreibkreide von Rügen. – Cbl. Mineral. Geol. Paläont., B (6): 377 - 381, 4 fig.
New fossil species: *Otolithus (Gadidarum) rugiae*.

Weiler, W., 1929. *Prolebias praecursor* n. sp. aus den Süßwasserschichten des Cyrenenmergels im Mainzer Becken. – Notizbl. Ver. Erdkd. u. Hess. Geol. L.A. (5-F.), 12: 110 - 111, pl. 6.

Weiler, W., 1968. Die Otolithen der bathypelagischen Familie Melamphaidae und ihre systematische Bedeutung (Pisces). – Senckenbergiana biol., 49 (3/4): 223 - 230, 7 fig.

Illustrated recent otoliths: *Scopeloberyx robustus*, *Poromitra crassiceps*, *Sio nordenskjöldii*, *Scopelogadus* sp., *Melamphaes lugubris*, *Scopelogadus mizolepis bispinosus*, *Melamphaes acanthomus*.

Weiler, W., 1968. Otolithi Piscium (Neubearbeitung). – Fossilium Catalogus, I. Animalia, 117: 1 - 196.

Weiler, W., 1969. Fisch-Otolithen aus der Unter-Kreide der Umgebung von Hannover und aus dem Unter-Eozän von Fehmarn. – Senckenb. Lethaea, 50 (4): 357 - 366, 8 fig.

Weiler, W., 1971a. *Palealbula ventralis* n. sp. (Pisces, Clupeiformes) aus dem Neocom (Unter-Hauterive) von Englebostel bei Hannover. – Senckenb. Lethaea, 52 (1): 1 - 3, 3 fig.

New fossil species: *Palealbula ventralis*.

Weiler, W., 1971b. Fisch-Otolithen aus dem Jungtertiär Süd-Siziliens. – Senckenb. Lethaea, 52 (1): 5 - 37, pl. 1 - 2.

New fossil species: *Diaphus praerafinesquii*, *Carapus praeimberbis*, *Neoscombrops praeannectens*.

Illustrated recent otoliths: *Hygophum benoitii*, *Ceratoscopus townsendi*, *C. maderensis*, *Diaphus rafinesquii*, *Electrona carlsbergi*, *E. crockeri*, *E. rissoi*, *E. subaspera*, *Hygophum atratum*, *H. hygomi*, *Benthoema panamense*, *B. glaciale*, *Lampanyctus crocodilus*, *Neoscombrops annectens*.

Weiler, W., 1972a. Fische. In: F. Doebl, H. Mowahed-Awal, P. Rothe, V. Sonne, H. Tobien, H. Weiler & W. Weiler, 1972. Ein 'Aquitain'-Profil von Mainz-Weisenau (Tertiär, Mainzer Becken). Mikrofaunistische, sedimentpetrographische und geochemische Untersuchungen zu einer Gliederung. – Geol. Jb., A5: 75 - 81, pl. 15.

New fossil species: *Morone brevis*.

Illustrated recent otoliths: *Argentina sphyraena*, *A. sp.*, *A. silus*, *A. striata*, *A. sialis*, *Glossanodon semifasciatus*.

Weiler, W., 1972b. Fisch-Otolithen aus der unteren Kreide Niedersachsens. – Ber. Naturhist. Ges., 116: 71 - 79, 5 fig.

New fossil species: *Palealbula gracilis*, *Otolithus* (inc. sed.) *rostratus*, *O.* (inc. sed.) *pockrandti*.

Weiler, W., 1973. Erster Nachweis von Otolithen der Familie Umbridae (Pisces) im Tertiär des Mainzer Beckens, mit Bemerkungen über die phyletischen Beziehungen innerhalb der Unterordnung Esocidae. – Senckenb. Lethaea, 5 (6): 455 - 467, 14 fig.

New fossil species: *Paleumbra moguntina*, *P. ? acutirostris*.

Illustrated recent otoliths: *Umbra krameri*, *U. limi*, *Novumbra hubbsi*.

Weinfurter, E., 1967. Die miozäne Otolithenfauna von St. Veit an der Triesting, NO. – Ann. Naturhistor. Mus. Wien, 71: 381 - 393, pl. 1 - 2.

New fossil species: *?Smerdis kühni*.

Weitzman, S. H., 1954. The osteology and the relationships of the South American Characid fishes of the subfamily Gasteropelecinae. – Stanford Ichth. Bull., 4 (4): 213 - 263, 18 fig.

Illustrated recent otolith: *Carnegiella vesca*.

Weitzman, S. H., 1962. The osteology of *Brycon meeki*, a generalized Characid fish, with an osteological definition of the family. – Stanford Ichth. Bull., 8 (1): 3 - 77, 21 fig.

Illustrated recent otolith: *Brycon meeki*.

Weitzman, S. H., 1967b. The osteology and relationships of the Astronesthidae, a family of oceanic fishes. – Dana Rep., (71): 1 - 54, 31 fig.

Illustrated recent otolith: *Astronesthes niger*.

Weitzman, S. H., 1974. Osteology and evolutionary relationships of the Sternoptychidae, with a new classification of Stomatoid families. – Bull. amer. Mus. nat. Hist., 153 (3): 331 - 478, 113 fig.

Illustrated recent otoliths: *Spirinchus thaleichthys*, *Vinciguerria lucetia*, *Polymetme corythaeola*, *Thorophos nexilis*, *Maurolicus muelleri*, *Danaphos oculatus*, *Valenciennellus tripunctulatus*, *Argyripnus* sp., *A. atlanticus*, *Sonoda megalophthalma*, *Polyipnus asteroides*, *P. aquavitus*, *Ichthyococcus irregularis*, *Argyropelecus aculeatus*, *A. affinis*, *Sternoptyx diaphana*.

Wigley, R. L. & F. C. Stinton, 1973. Distribution of macroscopic remains of recent animals from marine sediments off Massachusetts. – Fishery Bull., 71 (1): 1 - 40, 26 fig.

ADDENDUM

Darteville, E. & E. Casier, 1959. Les poissons fossiles du Bas-Congo et du régions voisines (Troisième partie). – Ann. k. mus. Belg. Congo, (3) 2 (3): 257 - 568, pl. 23 - 39.

New fossil species: *Otolithus (Merlucciidarum) signeuxae*.

McCosker, J. E., 1977. The osteology, classification, and relationships of the eel family Ophichthidae. – Proc. Calif. Acad. Sci., Ser. 4, 41 (1): 1 - 123, 45 fig.

Illustrated recent otoliths: *Ophichthus triserialis*, *O. zophochir*, *Ophisurus serpens*, *Echiophis intertinctus*, *Ethadophis merenda*, *Myrichthys xystrurus*, *Echelus pachyrhynchus*, *Aplathophis chauliodus*, *Myrophis vafer*.

Pomerol, C., 1973. Stratigraphie et paléogéographie. Ere cénozoïque (Tertiaire et Quaternaire), Paris (Doin), 269 pp. In this general treatise, Pomerol figured 8 photographs of otoliths from the collection Stinton, on page 122. Among them, *Lactarius amplus* (fig. 4.11.8) is new. Authorship of this species belongs to Pomerol, as stated by Stinton (1978, p. 181).

Schwarzhan, W. & W. Weiler, 1971. Ein ungewöhnlicher Fund von Otolithen 'in situ' aus dem mittelliozänen Meeressand des Mainzer Beckens. – Senckenb. Lethaea, 52 (5/6): 529 - 535, 5 fig.

New fossil species: *Trigla hemmoorensis*.

Illustrated recent otoliths: *Pterygotrigla polyommata*, *Prionotus carolinus*.

Stinton, F. C. & D. Nolf, 1970. A Teleost otolith fauna from the Sands of Lede, Belgium. – Bull. Soc. belge Géol., Paléont., Hydrol., 78 (3-4): 219 - 234, 1 pl.

New fossil species: *Anguilla rectangularis*, *Gymnothorax diagonalis*, *Moringua fissura*, *Lepophidium aequalis*, *Hoplobrotula lerichei*, *Antigonia angusta*, *Platycephalus aculeatus*, *Apogon aramhourgi*, *Ambassis electilis*, *Serranus (Serranellus) delicatulus*, *Centropistes exsculptus*, *Lagodon pectinoides*, *Oblada joneti*.

N.B. The new fossil species mentioned in the addendum have already been incorporated in the alphabetical list.

ALPHABETICAL LIST OF FOSSIL NOMINAL SPECIES DESCRIBED SINCE 1968

All species are arranged in alphabetical order of generic names, disregarding the possible prefix 'Otolithus' or 'genus'. The spelling is the same as in the original publication. It is stressed that insertion in this list does not mean that the authors regard a name as valid or correct.

Acropomidarum martini Gaemers & Hinsbergh, 1978
Adioryx ostialis Steurbaut, 1979b

Albula hantoniensis Stinton, 1975
Albula incurvata Stinton, 1975

- Albula marginalis* Stinton, 1975
Albula obesa Stinton, 1973
Albula raphiodon Stinton, 1975
Alepocephalus novus Stinton, 1977a
Alosa incisa Stinton, 1977a
Ambassis electilis Stinton & Nolf, 1970
Ammodytes lanceolatus sculptus Gaemers & Schwarzhans, 1973
Ammodytes rostratus Gaemers & Schwarzhans, 1973
Ammodytes vasseuri Nolf & Lapierre, 1977
Anguilla annosa Stinton, 1975
Anguilla pectinata Stinton, 1977b
Anguilla rectangularis Stinton & Nolf, 1970
Anguilla rouxi Nolf, 1974
Antennarius curvatus Stinton, 1978
Antennarius excavatus Stinton, 1978
Antennarius falcatus Stinton, 1978
Antennarius hamatus Stinton, 1978
Antennarius validus Stinton, 1978
Antigonia angusta Stinton & Nolf, 1970
Antigonia postangusta Holec, 1975b
Aphanius (Aphanius) chios Malz, 1978c
Aphanius moraviae Brzobohatý, 1969
Apogon arambourgi Stinton & Nolf, 1970
Apogonidarum ventrolobatus Schwarzhans, 1973
Archengraulis productus Stinton & Torrens, 1968
Archyloplecus weinfurteri Brzobohatý & Schultz, 1978
Ariosoma coheni Nolf & Martinell, in press
Arnoglossus inconspicuous Smigielska, 1973
Astroconger crassus Stinton, 1975
Astroconger ellipticus Stinton, 1975
Atherina magereli Nolf & Lapierre, 1977
Aulopus sinuosus Stinton, 1977a

Bathycongrus twistringenensis Schwarzhans, 1976
Bauzaia ornatissima Robba, 1970
Bauzaia tuberosa Robba, 1970
Bembrops vandeveldeae Steurbaut, 1979b
Beryx nova Stinton, 1978
'genus *Blenniidarum*' *blondeaui* Nolf & Lapierre, 1979
Benthosema fitchi Brzobohatý & Schultz, 1978
Bonapartia spina Heinrich, 1969
'genus *Bothidarum*' *biaculeatus* Nolf & Lapierre, 1979
Bothidarum rhomboides Schwarzhans, 1973
Bothidarum weileri Schwarzhans, 1974
? *Bothus semen* Nolf, 1973a
Bregmaceros oblongus Schwarzhans, 1977
Brosme heinrichi Gaemers, 1976b
Brosme tejkali Brzobohatý & Schultz, 1978
'genus aff. *Brosmophycis*' *brevis* Nolf, 1974

Brotulidarum cetonaensis Schwarzhans, 1979
Brotulidarum phaseoloides Gaemers & Hinsbergh, 1978

? *Caesio concavissimus* Nolf, 1973c
Callionymus lerehardi Nolf & Lapierre, 1979
Callionymus schuermanni Schwarzhans, 1973
'genus *Caproidarum*' *sonodae* Nolf & Lapierre, 1979
Capros exiguus Stinton, 1978
Capros incisus Stinton, 1978
Carangidarum robustus Gaemers & Hinsbergh, 1978
Carapus nuntius elongatus Gaemers & Schwarzhans, 1973
Carapus praeimberbis Weiler, 1971b
Centroberyx crenulatus Stinton, 1978
Centroberyx elegans Stinton, 1978
Centroberyx rotundus Stinton, 1978
Centrogenys ornatus Stinton, 1978
Centropomus annectens Stinton, 1978
Centropistes exsculptus Stinton & Nolf, 1971b
? *Centropyge kotthausi* Nolf, 1973c
Cepola massiva Nolf & Lapierre, 1979
Chana antiqua Stinton, 1978
Chanda bohlkei Nolf & Cappetta, 1976
Chanda convexa Stinton, 1978
Chanda fimbriata Stinton, 1978
Chanda lobata Stinton, 1978
Chanda ovalis Stinton, 1978
Chanda pentagonalis Stinton, 1978
Chanda rhomboides Stinton, 1978
Chanda turgida Stinton, 1978
'genus *Chandidarum*' *inflatus* Nolf & Lapierre, 1979
'genus *Chandidarum*' *steurbauti* Nolf & Lapierre, 1979
Chanos compressus Stinton, 1977a
Chaunax semiangulatus Stinton, 1978
Chelidonichthys curvatus Stinton, 1978
Chirocentrus exilis Stinton, 1977a
Chlorophthalmus elongatus Stinton, 1977a
Citharopsettodes angustus Schwarzhans, 1979
Cleidogonia antiqua Stinton & Torrens, 1968
Clupea bonii Anfossi & Mosna, 1971
'genus *Clupeidarum*' *schantzi* Nolf & Lapierre, 1979
Ot. (Clupeidarum) singularis Brzobohatý, 1969
Clupeiformorum planus Gaemers & Hinsbergh, 1978
Coelorhynchus yakuojiensis Ohe & Araki, 1973
Coelorinchus triquetrus Stinton, 1977a
Colliolus johannettae Gaemers, 1976b
Colliolus minutulus Gaemers, 1978b
Colliolus parvus Gaemers, 1976b
Colliolus schwarzhansi Gaemers, 1976b

- Conger durus* Aoki, 1968
Conger ellipticus Aoki, 1971
Conger extensus Stinton, 1975
Conger productus Stinton, 1975
Congermuraena weileri Jonet, 1972-73
Otolithus (Congridarum) bellus Aoki, 1968
Otolithus (Congridarum) rhombicus Aoki, 1971
Corvina dacica Pana, 1977
Corvina dobrogica Pana, 1977
Corvina rumana Pana, 1977
Otolithus (Cottidarum) jizodoensis Aoki, 1971
Otol. (Cottidarum) modestus Smigielska, 1973
Cottus parascorpius Lafond-Grellety, 1963
Otolithus (Crangidarum) calidus Aoki, 1968
Cyprinodon dentifer Stinton & Kissling, 1968
Cyprinodon subtrigonus Stinton & Kissling, 1968
 'genus *Cyprinodontidarum*' *angulosus* Steurbaut, 1979a
 'genus *Cyprinodontidarum*' *feistae* Steurbaut, in press
 'genus *Cyprinodontoideorum*' *labretensis* Steurbaut, 1979a
 'genus *Cyprinodontoideorum*' *obesus* Steurbaut, 1979a

Dactyloptena crenata Stinton, 1978
Dactyloptena lobata Stinton, 1978
Dactyloptena orbicularis Stinton, 1978
Dapalis bartensteini Malz. 1978c
Dapalis carinatus Stinton & Kissling, 1968
Dapalis rhomboidalis Stinton & Kissling, 1968
Dapalis vectensis Stinton, 1978
Dentex kokeni Gaemers & Hinsbergh, 1978
Dentex (Polysteganus) nolfi Steurbaut, 1979b
Dermatopsis astrictus Stinton, 1977a
Diaphus angulatus Ohe & Araki, 1973
Diaphus cahuzaci Steurbaut, 1979b
Diaphus crassus Schwarzhans, 1979
Diaphus hataii Ohe & Araki, 1973
Diaphus italicus Anfossi & Mosna, 1971
Diaphus poignantae Steurbaut, 1979b
Diaphus praerafinisquii Weiler, 1971b
Dinematichthys brevisulcus Stinton, 1977a
Diplacanthopoma tortonesei Nolf, 1977
Diplodus karrerae Nolf & Steurbaut, 1979
Diplodus racheboeufi Lanckneus & Nolf, 1979
Dussumieria amussa Stinton, 1977a

Echelus contractus Stinton, 1975
Echelus crenulatus Stinton, 1975
Echiodon heinzeli Huyghebaert & Nolf, 1979
Electrona anfossimosnai Schwarzhans, 1979
Encheliophis triangularis Stinton, 1977a

Epinephelus constrictus Stinton, 1978
Epinephelus exacutus Stinton, 1978
Epinephelus nodosus Stinton, 1978
Epinephelus plicatus Stinton, 1978
Epinephelus postangulatus Nolf, 1973a
Etrumeus undatus Stinton, 1977a
Eucitharus belgicus Gaemers, 1972
Eucitharus lusitanicus Jonet, 1972-73
Exallias vectensis Nolf, 1973c
Gadichthys altus Gaemers & Hinsbergh, 1978
Gadichthys benedeni verticalis Gaemers & Schwarzhans, 1973
Gadichthys undosus Gaemers, 1973
Gadiculus deurnensis Nolf, 1977
 'genus *Gadidarum*' *ensiformis* Steurbaut & Herman, 1978
 'genus *Gadidarum*' *lerichei* Nolf, 1977
Otolithus (Gadidarum) rugiae Voigt, 1928
Gadus parallelus Gaemers, 1976b
Gadus robustus Robba, 1970
Gadus varians Stinton, 1977a
Gadus wansinensis Casier, 1943
Gaidropsarus acuticaudatus Gaemers, 1973
 'genus aff. *Gazza*' *pentagonalis* Nolf & Lapierte, 1979
Genypterus rectangularis Nolf, 1973c
Gephyroberyx hexagonalis Stinton, 1978
Glyptorhynchus triangulus Robba, 1970
Gnathophis kanazawai Nolf & Martinell, in press
Gnathophis obesus Stinton, 1975
(Gobiidarum) bicornutus Gaemers & Schwarzhans, 1973
(Gobiidarum) dorsoconcavus Gaemers & Schwarzhans, 1973
(Gobiidarum) modestus Gaemers & Schwarzhans, 1973
(Gobiidarum) rectangularis Gaemers & Schwarzhans, 1973

Gobius arenosus Aoki, 1971
Gobius copiosus Aoki, 1968
Gobius gibbosus Pana, 1977
Gobius ingens Aoki, 1968
Gobius notoensis Aoki, 1967
Gobius ornatus Gaemers & Schwarzhans, 1973
Gobius puellaris Aoki, 1968
Gobius rarus Aoki, 1971
Gobius rusticus Aoki, 1967
Gobius sectus Stinton & Kissling, 1968
Gobius truncatus Schwarzhans, 1979
Gobius urbanus Aoki, 1968
Gymnoscopelus fitchi Schwarzhans, 1979
Gymnothorax diagonalis Stinton & Nolf, 1970
Gyrosteus subdeltoideus Stinton & Torrens, 1968

- Prionotus contiguus* Stinton, 1978
Prionotus tortuosus Stinton, 1978
Pristigenys caduca Nolf, 1973a
Prolebias senesi Brzobohaty & Stancu, 1974
Promyllantor fastigatus Stinton, 1975
Promyllantor guttulus Stinton, 1975
Promyllantor impletus Stinton, 1975
Promyllantor similis Stinton, 1975
Psettodes collatus Nolf, 1973a
Psettodes oedelemensis Nolf, 1973b
Psettodes spinosus Nolf, 1973c
Pseudocolliolus cuykensis Gaemers, 1978b
Pseudorhombus helvecianus Jonet, 1972-73
Pterothrissus cristatus Stinton, 1975
Pterothrissus leiodus Stinton, 1975
Pterothrissus protensus Stinton, 1975
- Raniceps altus* Nolf, 1974
Raniceps elegans Stinton, 1977a
Raniceps hermani Nolf, 1978a
Rhomboplites casieri Nolf, 1970
- Sardinella extensa* Stinton, 1977a
Sardinella spatiosa Stinton, 1977a
?Saurida indansi Schwarzhans, 1977
Saurida rectilineata Steurbaut, 1979b
Saurida tenuis Stinton, 1977a
Sciaena moguntiniiformis Pana, 1977
Otolithus (Sciaenidarum) clarus Aoki, 1971
Scombridarum biscalptatus Schwarzhans, 1974
Scorpaena edegemensis Gaemers, 1973
Scorpaena regularis Stinton, 1978
Scorpaenodes recurvus Stinton, 1978
Sebastes weileri Gaemers, 1972
Sebastodes perangustus Stinton, 1978
Otolithus (Serranidarum) anesakiensis Aoki, 1971
Serranus delicatulus Stinton & Nolf, 1970
Serranus krefeldensis Schwarzhans, 1974
Sirembo convexus Stinton, 1977a
Sirembo tumidus Nolf, 1973c
?Smerdus kühni Weinfurter, 1967
 'genus *Soleidarum*' *schultzei* Nolf & Lapierre, 1979
Otolithus (Sparidarum) babai Aoki, 1968
 'genus *Sparidarum*' *whiteheadi* Nolf, 1977
Spicara kugleri Nolf, 1977
Spicara arambourgi Nolf, 1973a
Sphaeronchus circularis Stinton & Torrens, 1968
Sphaeronchus dorsetensis Stinton & Torrens, 1968
Sphaeronchus rotundus Stinton, 1973
Stolephorus furculus Stinton, 1977a
- Stolephorus productus* Stinton, 1977a
Stromateus brailloni Nolf, 1975
 'Genus *Synodontidarum*' *intermedius* Nolf & Capetta, 1976
Synodus bisectus Stinton, 1977a
Symbolophorus haereticus Brzobohaty & Schultz, 1978
Symbolophorus meridionalis Steurbaut, 1979b
- Toxotes wheeleri* Nolf & Lapierre, 1979
Trachichthodes pattersoni Nolf, 1975a
Trachichthodes weileri Nolf, 1970
Trachichthodes abditus Stinton, 1978
Trachinus angustus Gaemers & Hinsbergh, 1973
Trachinus gaemersi Schwarzhans, 1973
Trachurus elegans Jonet, 1972-73
Trachyrincus minusculus Stinton, 1977a
 'genus *Trichiuridarum*' *wongratanai* Nolf, 1977
Trigla? gibbosa Stinton, 1978
Trigla hemmoorensis Schwarzhans & Weiler, 1971
 'genus *Triglidarum*' *giganteus* Nolf, 1977
 'Genus *Triglidarum*' *parvulus* Steurbaut, 1979b
Tripterophycis multituberosus Gaemers, 1973
Tripterophycis multituberosus moravicus Brzobohaty & Schultz, 1978
Trisopterus antwerpensis Gaemers, 1971
Trisopterus concavus Gaemers, 1976b
Trisopterus elongatus Gaemers & Schwarzhans, 1973
Trisopterus incognitus Gaemers, 1976b
Trisopterus kasselensis Schwarzhans, 1974
Trisopterus pliogenicus Gaemers & Schwarzhans, 1973
- Umbra valida* Stinton, 1977a
 'genus *Umbridarum*' *ringeadei* Steurbaut, 1979a
Uranoscopus septentrionalis Nolf, 1978b
Uroconger emarginatus Stinton, 1975
Uroconger incisurus Stinton, 1975
- 'Genus aff. *Valenciennellus*' *kotthausi* Steurbaut, 1979b
- Xiphiurus nodosus* Stinton, 1977a
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